



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,074	02/01/2001	Gerhard Reichert	1663-I-CIP	8012

7590 04/22/2004

Fred H. Zollinger, III  
SAND & SEBOLT  
Aston Park Professional Centre  
4801 Dressler Rd., NW, Suite 194  
Canton, OH 44718-3669

EXAMINER
----------

A, PHI DIEU TRAN

ART UNIT	PAPER NUMBER
----------	--------------

3637

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/775,074

Applicant(s)

REICHERT, GERHARD

Examiner

Phi D A

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 23-30, 32-34 and 36-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-30, 32-34 and 36-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Lines 5-6 “ a cross sectional perimeter...normal to the longitudinal direction...grid” is indefinite. It is unclear what applicant is trying to define here.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 3637

2. Claims 23, 26-30, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoakes (4756131).

Stoakes (figure 2) shows a muntin grid piece comprising a rigid inner muntin grid element (42), a flexible collapsible outer muntin grid element (44), the collapsible outer muntin grid element being capable of being collapsed upon itself and reopened, the outer muntin grid element substantially surrounding the inner muntin grid element to hide the inner muntin grid element (42) from view on both sides of the window when the muntin grid piece is installed, the outer element being in the form of a tube disposed around the inner muntin grid element, the outer element is connected to the inner muntin grid element with a connector (the slot or groove where edge of part 42 is extended), the outer element including at least one protruding foot (the parts which press against the glass panes) that increases the width of the outer muntin element, the outer element being resilient, the outer element defining a slit (the opening in the middle of part 44), the slit in the outer element defining opposed ends with the opposed ends being angled (0o).

3. Claims 23-29, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Baratuci et al (5851609).

Baratuci et al (figure 7) shows a muntin grid piece comprising a rigid inner muntin grid element (610, 25), a flexible collapsible outer muntin grid element (330, 730), the collapsible outer muntin grid element being capable of being collapsed upon itself and reopened, the outer muntin grid element substantially surrounding the inner muntin grid element to hide the inner muntin grid element (42) from view on both sides of the window when the muntin grid piece is installed, the outer muntin grid element being fabricated from a foam material, the outer element

Art Unit: 3637

having a desiccant, the outer element being in the form of a tube disposed around the inner muntin grid element, the outer element is connected to the inner muntin grid element with a connector( 320, 720), the outer element being resilient, the outer element defining a slit (the opening in the middle of part 330 forming the U-shape), the slit in the outer element defining opposed ends with the opposed ends being angled (90o, figure 7).

4. Claims 33-34, 36-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Baratuci et al (5851609).

Baratuci et al (figure 7) shows simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising first and second spaced glass sheets (22, 23) defining an insulating chamber, a muntin bar disposed within the insulating chamber, the bar having an inner muntin grid element (610, 25), an outer muntin grid element (330, 730), the outer element being a collapsible and resilient flexible tube having an inner surface and an outer surface, the collapsible tube being capable of being collapsed upon itself and reopened to a tube form, the outer element substantially surrounds the inner muntin grid element, the tube defining a longitudinal slit (the opening of the U-shape tube) to be wrapped around the inner muntin grid element, the slit extending from the inner surface to the outer surface of the outer muntin grid element, the outer element being fabricated from a foam material with desiccant, the slit extending from the inner surface to the outer surface through the sidewall of the tube (essentially so as the slit forming the opening through the side wall at the top of the structure) element defining a slit (the opening in the middle of part 330 forming the U-shape), the slit in the outer element defining opposed ends with the opposed ends being angled (90o, figure 7).

Art Unit: 3637

5. Claims 23-29, 32-34, 36-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Peterson (6351923).

peterson (figure 2, 7) shows simulated divided lite insulating glazing unit having an internal muntin bar, the unit comprising first and second spaced glass sheets (14a, 14b) defining an insulating chamber, a muntin bar disposed within the insulating chamber, the bar having an inner muntin grid element (126, figure 8), an outer muntin grid element (64, figure 2), the outer element being a collapsible and resilient flexible tube having an inner surface and an outer surface, the collapsible tube being capable of being collapsed upon itself and reopened to a tube form, the outer element substantially surrounds the inner muntin grid element, the tube defining a longitudinal slit (the opening of the U-shape tube) to be wrapped around the inner muntin grid element, the slit extending from the inner surface to the outer surface of the outer muntin grid element, the outer element being fabricated from a foam material with desiccant, the slit extending from the inner surface to the outer surface through the sidewall of the tube (essentially so as the slit forming the opening through the side wall at the top of the structure) element defining a slit (the opening in the middle of part 126 forming the U-shape), the slit in the outer element defining opposed ends with the opposed ends being angled (90°, figure 1), the inner muntin grid element having a plurality of spaced corners and a cross sectional perimeter dimension measured about a cross section normal to the longitudinal direction of the inner muntin grid element, the outer element having a body having spaced parallel longitudinal ends that define the width of the body, the width being substantially equal to the cross section perimeter dimension of the inner muntin grid element, the body defining one corner notch for each corner of the inner muntin grid element (figure 8), the corner notches being spaced apart to

Art Unit: 3637

align with the corners of the inner muntin grid element when the body is warped around the inner muntin grid element, an adhesive connected to the body, the adhesive adapted to connect the body to the inner muntin grid element when the body is wrapped around the inner muntin grid element.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoakes (4756131) in view of Donaldson (6192651).

Stoakes shows all the claimed limitations except for the outer element being fabricated from a foam material.

Donaldson discloses foam material (24) forming an outer element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Stoakes to show the outer element being fabricated from a foam material as taught by Donaldson because foam material is a well known material for forming a grid element as it has great heat insulation property and light weight.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoakes (4756131) in view of Donaldson (6192651) as applied to claim 24 above and further in view of Baier (5345743).

Art Unit: 3637

Stoakes shows all the claimed limitations except for the outer element having a desiccant.

Baier discloses desiccant within an insulated glass to absorb moisture within the glass chamber.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Stoakes's modified structure to show the outer element being the outer element having a desiccant as taught by Baier because it would help absorb moisture seeping into the double layer glass panel and thus keeping the panel clear.

### ***Response to Arguments***

9. Applicant's arguments with respect to claims 23-30, 32-34, 36-49 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different muntin grid designs.

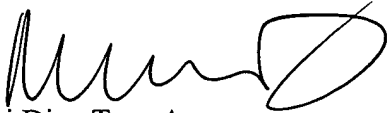
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 703-306-9136. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 3637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of several loops and a final large circular flourish.

Phi Dieu Tran A

4/18/04